

# **Annual Progress Report 2004-2005**

## **INTEGRATED STATUS & EFFECTIVENESS MONITORING PROGRAM**

**BioAnalysts, Inc.  
Master Agreement 14744 - Release 1**

### **Project 2003-017-00**

This annual report describes activities conducted by BioAnalysts during the period September 1, 2004 to September 1 2005 on Project 2003-017-00, Release 1. This report summarizes the status of the budget, work completed, and schedule deviations.

#### **Objective 1: Monitoring and Coordination Activities for Pilot Intensive RME Program in the Wenatchee Subbasin.**

##### ***Budget:***

The total budget for this objective was \$49,262. BioAnalysts spent \$26,934, leaving \$22,328 unspent funds. BioAnalysts purchased no equipment or supplies under this contract.

##### ***Study Area:***

Work conducted by BioAnalysts under this contract focused on monitoring activities within the Wenatchee subbasin. The subbasin is located in north-central Washington and lies entirely within Chelan County. The subbasin consists of about 854,000 acres, of which about 90% is in federal and state ownership. Spring Chinook and steelhead spawn and rear within the subbasin. Monitoring within the subbasin primarily addressed the spatial distribution of these two species.

##### ***Methods:***

BioAnalysts provided technical advice to monitoring entities within the Upper Columbia. This involved reviewing documents and field data forms, and attending workshops and meetings. No field work was conducted by BioAnalysts under this objective.

##### ***Work Completed:***

Under this objective, BioAnalysts completed the following:

1. Attended workshops and meetings in the Upper Columbia that reviewed and compared monitoring protocols and designs with other programs (Okanogan Monitoring Program) in the region.
  - Conducted a detailed comparison of differences in protocols used in the Upper Columbia Strategy with those used in the Okanogan Monitoring Program.
  - Identified indicators that need to be compared during field surveys (see Upper Columbia Regional Technical Team Monitoring Subcommittee report to BPA, 2005).
  - Identified protocols for indicators that need to be changed in the Upper Columbia Strategy (e.g., substrate composition, riparian vegetation, human disturbance, and fish cover). These changes will be made during autumn 2005 following the summer field work.
2. Consulted on changes in the sampling frame for status/trend monitoring in the Wenatchee subbasin.
  - Based on 2004 work, we revised the sampling frame to capture more likely anadromous fish spawning and rearing areas.
3. Reviewed sampling procedures and data forms for the USFS and DOE.
  - Reviewed and commented on repeated sampling surveys for the USFS.
  - Reviewed and provided suggestions on USFS habitat/fish data forms.
  - Reviewed and provided suggestions on DOE habitat data forms.
  - Addressed questions on the monitoring protocols identified in the Upper Columbia Strategy.
4. Compiled information for developing a protocol manual for the Upper Columbia Basin.
  - Worked with Mike Ward on information (EMAP, Forest Service, State protocols) needed to write a protocols manual for the Upper Columbia Strategy.
5. Reviewed Appendix A (appendix to the Upper Columbia Monitoring Strategy) prepared by Mike Ward.
  - Provided comments on hypotheses and sampling methods for monitoring activities in the Wenatchee Subbasin.
6. Provided consultation to the USFS, Chelan County, USFWS, and Mike Ward on monitoring the effectiveness of stream actions proposed for the mainstem.
  - Provided technical information on effectiveness monitoring designs, sampling periods, sampling locations, and survey methods.
7. Attended meetings on coordination of monitoring activities in the Wenatchee subbasin.
  - Coordination activities included a discussion of all proposed monitoring activities by different entities working in the Wenatchee subbasin.
  - Worked with Mike Ward on scheduling monitoring activities.

Most of the work conducted by BioAnalysts in 2004-2005 focused on coordination and identifying weaknesses in the Upper Columbia Strategy. During the period 2005-2006, following the second year of field work, BioAnalysts will update the Upper Columbia Monitoring Strategy and work with Mike Ward in developing a protocols manual for the

Upper Columbia Strategy. This work will rely on information generated from the recent protocols comparison study conducted in the John Day Basin.

***Problems, Changes in Plan, or Schedule Deviations:***

BioAnalysts experienced no problems working under this objective. There were no substantive changes in plans or schedules.

***Summary and Conclusion:***

During the contract period 2004-2005, BioAnalysts provided technical advice and reviews on status/trend and effectiveness monitoring within the Upper Columbia Basin (Wenatchee subbasin). The work conducted by BioAnalysts improved coordination of monitoring activities in the Upper Columbia, revised and improved the sampling frame, clarified and refined measuring protocols, and identified potential weaknesses in the monitoring strategy that needed to be addressed during the 2005 field work. We also began the process of compiling information needed to write a protocol manual for the Upper Columbia Strategy. This manual will provide field crews more detailed information on measuring indicators in the field. The work conducted by BioAnalysts was well under budget and on time.